Tetrachlorvinphos DRA

Current Status

- Tetrachlorvinphos (TCVP) is an organophosphate (OP) insecticide used to control fleas, ticks, various flies, lice, and insect larvae on livestock and domestic animals and their premises. TCVP is also applied as a perimeter treatment.
- There are no registered crop uses for TCVP.
- Residential uses include pet collars, flea and tick powder, pump sprays for pets.
- The ecological risk assessment was completed September 22, 2015. OCSPP intends to finalize a revised human health DRA in June 2020 to include additional registrant data provided in August 2019.
- In April 2009, the Natural Resource Defense Council (NRDC) petitioned the EPA to cancel all TCVP pet products citing risks to toddlers from hand-to-mouth exposure from residential pet-care uses. A revised human health risk assessment was issued in 2016. EPA responded that it would address pet-care uses in registration review.
- In May 2019, NRDC filed a petition with the Ninth District Court for an "unreasonable delay" on EPA's part to respond. Oral arguments were held in early February 2020 and a Court decision is pending.
- Publication Target and potential 60-day comment period may depend on when the Court makes a decision. At this time, OCSPP intends to publish the revised human health DRA on or before July 31, 2020.

Key Points

- Residential risks stemming from pet uses
- There are limited alternative pet collars to replace TCVP collars.
- Court decision may impact timeframe for comment period and Proposed Interim Decision

Human Health Risk Assessment Conclusions

- The revised human health DRA is presenting risk estimates with the 10X FQPA Safety Factor/Database Uncertainty Factor.
- The initial DRA identified potential dietary, residential, and occupational non-cancer risks depending on the LOC):
    - Dietary risks anticipated to be primarily a result of drinking water pending review of dietary inputs.
    - Some residential post-application margins of exposure (MOEs) are of concern for certain pet collars and pet dust products, depending on the LOC.
        - Residential post-application risk estimates for pet collars are as refined as possible, utilizing a submitted dust torsion study for the ratio of liquid/dust in the TCVP pet collar products and two chemical-specific transferable residue studies.
    - Some occupational handler MOEs are of concern for certain handheld equipment scenarios, fogging scenarios, and dust products depending on the LOC.
        - Some occupational handler risk estimates could be mitigated with the addition of PPE (i.e., a PF10 respirator), but some scenarios still remain a concern with maximum PPE.
- Cancer risk estimates have also been estimated for TCVP with potential risks identified for residential post-application exposure and occupational handler exposure
- HED cannot make aggregate safety finding based on potential dietary and residential risks.

Ecological Risk Assessment Conclusions

- Residues can pass through livestock and remain active in manure.
- The ecological DRA identified risks to birds, mammals, and freshwater invertebrates.
- DRA did not quantify risks to terrestrial invertebrates; however, based on available data terrestrial invertebrate risk.
- Single incident with bird categorized as highly probable.
- Tier 1 suite of laboratory-based studies of honey bees incomplete; missing acute/chronic oral toxicity for adult and larval bees.
- In March 2016 during 60-day comment period, EPA received comments on the EFED DRA from the United States Dept. of Agriculture (USDA), Bayer (registrant), and Centers for Biological Diversity (CBD) that are addressed in the EPA's "*Response to Comments on the Preliminary Ecological Risk Assessment for Tetrachlorvinphos (TCVP)*".

Communications

- No rollout is proposed; OCSPP/OPA will have a desk statement on-hand for any press inquiries.
- Some press is possible due to ongoing litigation.